



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

En-Hsing Chen, et al.

Title:

NAND MEMORY ARRAY INCORPORATING MULTIPLE SERIES

SELECTION DEVICES AND METHOD FOR OPERATION OF SAME

Application No.: 10/729,865

Filed:

December 5, 2003

Examiner:

Nguyen, Van Thu T.

Group Art Unit:

2824

Atty. Docket No.: 023-0029

Confirmation No.:

8494

March 15, 2005

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INFORMATION DISCLOSURE STATEMENT 37 C.F.R. § 1.97(b)

Dear Sir:

Pursuant to 37 C.F.R. § 1.56, § 1.97 and § 1.98, the undersigned brings to the Examiner's attention in the above-identified application the patents, publications, applications or other information identified in the attached:

\boxtimes	Form(s) PTO/SB/08A	(5 pag	ge(s), with	copy of	4 reference(s)).

Form(s) PTO/SB/08B (2 page(s), with copy of 20 reference(s)).

 \boxtimes Listing of Pending Applications (1 page(s), with copy of no application(s)).

Other: N/A

Citation of such information shall not be construed as (i) an admission that the information necessarily is, or corresponds to, prior art with respect to the instant invention, (ii) a representation that a search has been made, other than as described herein, or (iii) an admission that the information cited herein is, or is considered to be, material to patentability as defined in § 1.56(b).

For each item of information listed that is not in the English language, the undersigned has provided a concise explanation of the relevance through (i) an English language abstract, (ii) an English language equivalent application, or (iii) if cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action that indicates the degree of relevance found by the foreign office.

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	Pursuant to 1287 OG 163 (October 19, 2004), for those cited pending U.S. patent applications filed (or which entered the national stage under 35 U.S.C. § 371) on or after June 30, 2003 or which are otherwise stored in the USPTO's Image File Wrapper system, copies are not included.
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Attorney for Applicant(s) (512) 338-6313

Respectfully submitted.

(512) 338-6301 (fax)

EXPRESS MAIL LABEL:

TO/SB/08A (Substitute for form 1449/PTO)	Attorney Docket No.:	023-0029
	Application No.:	10/729,865
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	First Named Inventor:	En-Hsing Chen et al.
OIPE	Filing Date:	December 5, 2003
CIT	Group Art Unit:	2824
MAR 2 1 2005	Examiner Name:	Van Thu Nguyen
Sheet 1 of 5	Date Submitted:	March 15, 2005

			U.S. PATENT DO	CUMENTS		
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, W Relevant Passages or Rele Figures Appear	
	AA	4,142,176	02-27-1979	Dozier		
	AB	4,543,594	09-24-1985	Mohsen et al.		
	AC	4,602,354	07-22-1986	Craycraft et al.		
	AD	4,868,616	09-19-1989	Johnson et al.		
	AE	5,197,027	03-23-1993	Challa		
	AF	5,301,144	04-05-1994	Kohno		
,,,,,,,,	AG	5,412,493	05-02-1995	Kunii et al.		
	AH	5,429,968	07-04-1995	Koyama		
	AI	5,473,563	12-05-1995	Suh et al.		
	AJ	5,568,421	10-22-1996	Aritome		
	AK	5,621,683	04-15-1997	Young		
	AL	5,644,533	07-01-1997	Lancaster et al.		
	AM	5,703,382	12-30-1997	Hack et al.		
			FOREIGN PATENT	DOCUMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	AN	JA 62-142363	06-25-1987			
	AO	JA 62-155568	07-10-1987			
	AP	JA-2001-358237	12-26-2001			
	AQ	JA-2002-280467	09-27-2002			
Examiner Sig	nature	Examiner Signature			Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional).

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PTO/SB/08A (Substitute for form 1449/PTO)	Attorney Docket No.:	023-0029
	Application No.:	10/729,865
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	First Named Inventor	En-Hsing Chen et al.
(Continuation Sheet)	Filing Date:	December 5, 2003
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Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AR	5,715,194	02-03-1998	Hu	
	AS	5,751,012	05-12-1998	Wolstenholme et al.	
	AT	5,814,853	09-29-1998	Chen	
	AU	5,835,396	11-10-1998	Zhang	
	AV	5,898,615	04-27-1999	Chida	
	AW	5,923,587	07-13-1999	Choi	
	AX	5,926,415	07-20-1999	Shin	
	AY	5,940,321	08-17-1999	Takeuchi et al.	
	AZ	5,978,265	11-02-1999	Kirisawa et al.	
	BA	6,034,882	03-07-2000	Johnson et al.	
	BB	6,055,180	04-25-2000	Gudesen et al.	
	BC	6,107,658	08-22-2000	Itoh et al.	
	BD	6,185,122 B1	02-06-2001	Johnson et al.	
]	FOREIGN PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	BE				
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	First Named Inventor: En-Hsing Chen et al	1.
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	Examiner Name: Van Thu Nguyen	
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Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, W Relevant Passages or Rele Figures Appear	
	BI	6,188,611 B1	02-13-2001	Endoh et al.		
	ВЈ	6,291,836	09-18-2001	Kramer et al.		
	ВК	6,307,807 B1	10-23-2001	Sakui et al.		
	BL	6,326,269 B1	12-04-2001	Jeng et al.		
	ВМ	6,373,746 B1	04-16-2002	Takeuchi et al.		
	BN	6,434,053	08-13-2002	Fujiwara		
	во	6,445,613	09-03-2002	Nagai		
	BP	6,469,933 B2	10-22-2002	Choi et al.		
	BQ	6,473,328	10-29-2002	Mercaldi		
,	BR	6,477,077	11-05-2002	Okazawa		
	BS	6,490,194	12-03-2002	Hoenigschmid		
	ВТ	6,498,747	12-24-2002	Gogl et al.		
	BU	6,512,703 B2	01-28-2003	Sakui et al.		
	<u> </u>]	FOREIGN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
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	BZ	6,515,888	02-04-2003	Johnson et al.		
	CA	6,545,898	04-08-2003	Scheuerlein		
	СВ	6,567,312 B1	05-20-2003	Torii et al.		
	СС	6,597,609 B2	07-22-2003	Chevallier		
	CD	6,611,453	08-26-2003	Ning		
	CE	6,614,688 B2	09-02-2003	Jeong et al.		
	CF	6,618,292 B2	09-09-2003	Sakui		
	CG	6,621,743 B2	09-16-2003	Ogane		
	СН	6,822,903 B2	11-23-2004	Scheuerlein et al.		
	CI	6,849,905 B2	02-01-2005	Ilkbahar et al.		
	CJ	6,856,572 B2	02-15-2005	Scheuerlein et al.		
,	СК	6,859,410 B2	02-22-2005	Scheuerlein et al.		
	CL	US RE. 35,838	07-07-1998	Momodomi et al.		
	<u></u>		FOREIGN PATENT	DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	СМ					
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	СО					
	СР					
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	CQ	US-2002/0021587 A1.	02-21-2002	Sakui et al		
	CR	US-2002/0028541 A2	03-07-2002	Lee et al.		
	CS	US-2003/0155582 A1	08-21-2003	Mahajani et al.	·	
	СТ	US-2004/0124415	07-01-2004	Walker et al.		
	CU	US-2004/0124466	07-01-2004	Walker et al.		
· · · · · · · · · · · · · · · · · · ·	CV	US-2004/0125629 A1	07-01-2004	Scheuerlein et al.		
	CW	US-2004/045024 A1	07-29-2004	Chen et al.		
	CX	US-6,108,238	08-2000	Nakamura et al.		
	CY	US-6,049,494	04-2000	Sakui et al.		
	CZ	US-5,991,202	11-1999	Derhacobian et al.		
	DA	US-5,812,457	09-1998	Arase ·		
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	DC		· · · · · · · · · · · · · · · · · · ·			
]	FOREIGN PATENT	DOCUMENTS		
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	MAR MAR	2 1 2005	Group Art Unit:	2824		
	MAR	.J	Examiner Name:	Van Thu Nguyen		
Sheet 1 of 2	12.15	Kurik	Date Submitted:	March 15, 2005		
		NON PATENT LITERATURE DOCUME	NTS			
Examiner Initials*	Cite No.1				T ²	
	AA	DURISETY, CHANDRA SEKHAR ACHARYULU, "Analysis and C Gate Devices in 0.35um PDSOI Process", A Thesis Presented for the University of Tennessee, Knoxville, December 2002, pp. i-viii and 1-	Master of Science Degree			
	AB	EVANS, ROBERT J., ET AL., "Energy Consumption Modeling and of Solid-State Circuits, Vol. 30, No. 5, May 1995, pp. 571-579.	Optimization for SRAM'	s," IEEE Journal		
	AC	JUNG, TAE-SUNG, ET AL., "A 117-mm ² 3.3-V Only 128-Mb Multi- Storage Applications," IEEE Journal of Solid-State Circuits, Vol. 31,				
	AD	KAWAGOE, HIROTO, ET AL., "Minimum Size ROM Structure Cor LSI," IEEE Journal of Solid-State Circuits, Vol. SC-11, No. 3, June 1		te E/D MOS		
	AE	KIM, KYU-HYOUN, ET AL., "An 8-Bit-Resolution, 360-μs Write T on Differentially Balanced Constant-Tunneling-Current Scheme (DBC Circuits, Vol. 33, No. 11, November 1998, pp. 1758-1762.				
	AF	KIM, BYUNGCHEUL, ET AL., "A Scaled SONOS Single-Transisto Structure with Common Source Lines," Journal of the Korean Physics 2002, pp. 945-948.				
	AG	KIM, BYUNGCHEUL, ET AL., "Single Power Supply Operated and Highly Reliable SONOS EEPROMs," Journal of the Korean Physical Society, Vol. 40, No. 4, April 2002, pp. 642-644.				
	AH	KITANO, YOSHITAKA, ET AL., "A 4-Mbit Full-Wafer ROM," IEE SC-15, No. 4, August 1980, pp. 686-693.	E Journal of Solid-State	Circuits, Vol.		
	AI	LEE, YONG KYU, ET AL., "Multilevel Vertical-Channel SONOS Nonvolatile Memory on SOI," IEEE Electron Device Letters, Vol. 23, No. 11, November 2002, pp. 664-666.				
	AJ	LIN, HORNG-CHIH, ET AL., "Ambipolar Schottky-Barrier TFTs," IEEE Transactions on Electron Devices, Vol. 49, No. 2, February 2002, pp. 264-270.				
	AK	NAJEEB-UD-DIN ET AL., "Analysis of Floating Body Effects in Thin Film Conventional and Single Pocket SOI MOSFETs Using the GIDL Current Technique", IEEE Electron Device Letters, Vol. 23, No. 4, April 2002, pp. 209-211.				
	AL	NISHIHARA, TOSHIYUKI, ET AL., "A Quasi-Matrix Ferroelectric IEEE Journal of Solid-State Circuits, Vol. 37, No. 11, November 200		on Storage,"		
	AM .	PARK, KI-TAE, "Recent Non-Volatile Memory Device & Circuit Te unknown), 35 pages.	chnology," Halo LSI Inc,	(date		
	AN	ROIZIN, YAKOV, ET AL., "Plasma-Induced Charging in Two Bit po Semiconductor Ltd., Migdal HaEmek 23105, Israel, (date unknown),		s," Tower		

Date Considered

Examiner Signature

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 2 of 2	Date Submitted:	March 15, 2005

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.1	Include name of author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	AO	SHIN, JONGSHIN, ET AL., "A New Charge Pump Without Degradation in Threshold Voltage Due to Body Effect," IEEE Journal of Solid-State Circuits, Vol. 35, No. 8, August 2000, pp. 1227-1230.	
	AP	STURM, J. C., ET AL., "Leakage Current Modeling of Series-Connected Thin Film Transistors," IEEE Transactions on Electron Devices, Vol. 42, No. 8, August 1995, pp. 1561-1563.	
	AQ	SUGIBAYASHI, TADAHIKO, ET AL., "A 30-ns 256-Mb DRAM with a Multidivided Array Structure," IEEE Journal of Solid-State Circuits, Vol. 28, No. 11, November 1993, pp. 1092-1098.	
	AR	SUH, KANG-DEOG, ET AL., "A 3.3 V 32 Mb NAND Flash Memory with Incremental Step Pulse Programming Scheme," IEEE Journal of Solid-State Circuits, Vol. 30, No. 11, November 1995, pp. 1149-1156.	
	AS	TAKEUCHI, KEN, ET AL., "A Negative V _{th} Cell Architecture for Highly Scalable, Excellently Noise- Immune, and Highly Reliable NAND Flash Memories," IEEE Journal of Solid-State Circuits, Vol. 34, No. 5, May 1999, pp. 675-684.	
	AT	THEAN, AARON, ET AL., "Flash memory: towards single-electronics," IEEE Potentials, October/November 2002, pp. 35-41.	
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